THE GENUS TELOXYS (CHENOPODIACEAE)

William A. Weber
University of Colorado Museum
Campus Box 218, Boulder, CO 80309

The genus Chenopodium contains a species cluster which is distinctly disharmonic within it and that displays a unique constellation of characters. Moquin-Tandon (1834) proposed the genus Teloxys (not Teloxis!) to include what is presently known as Chenopodium graveolens Willd. In the Flora USSR (vol. 6) these are included in Sections Ambrina Benth. & Hook., and Botryoides C. A. Mey. in Ledebour. The species treated in the present paper share all or most of the following characters: foliage with a strong foetid odor (oil from the seeds has been used as a potent vermifuge), embryo incompletely encircling the endosperm, inflorescence distinctly dichasial but presenting a reduction series leading to sessile clusters; stamens exserted; foliage and calyces glandular, never farinose; leaves pinnatisect or -fid, entire in only one species. On a morphological basis this species cluster is as distinct from Chenopodium, typified by C. rubrum L., as is any other genus of the family, and forms a natural group of its own.

Teloxys has been ignored by taxonomists since Moquin, except for Sereno Watson, who proposed one species (Watson 1874). Aellen (1929) evidently did not consider Teloxys sufficiently different from the rest of Chenopodium to even discuss the genus.

The following new combinations are proposed.

Teloxys ambrosioides (L.) W. A. Weber, comb. nov. Chenopodium ambrosioides L., Sp. Pl. 219. 1753. This species shares with T. vagans of Chile the ultimate reduction of the dichasial inflorescence to clusters of sessile flowers along an elongate rachis. No vestige of the dichotomous branching remains. This also occurs in T. pumilio. T. vagans differs from T. ambrosioides in having loosely tomentose stems.

Teloxys aristata (L.) Moq., Ann. Sci., Nat. Bot. (2)1:290. 1834. Chenopodium aristatum L., Sp. Pl. 221. 1753. This Central Asiatic species is characterized by having linear, undivided leaves, and the lateral branches of dichasial cymes modified to form stiff spines, the flowers being completely suppressed. The calyx is without ornamentation and the plant lacks glands. In some populations of T. graveolens in Mexico the branches develop identical spinose branches, but in such instances the calyces and leaves are covered with many, rarely few, yellow glands, and the leaf blades are pinnatifid.

Teloxys botrys (L.) W. A. Weber, comb. nov. Chenopodium botrys L., Sp. Pl. 219. 1753. C. anthelminticum L. This species is similar to T. graveolens but does not develop the sterile lateral floral branches of the dichasium. As in T. ambrosioides, the sta-

mens are exserted.

Teloxys graveolens (Willd.) W. A. Weber, comb. nov. Chenopodium graveolens Willd., Enum. Hort. Berol. 1:290. 1809. C. incisum Poir., Encycl. Suppl. 1:392. 1810. Teloxys mandonii S. Wats., Proc. Amer. Acad. 9:91. 1874. This American species is very similar to T. aristata, but the side branches of the dichasia usually have abortive flowers at the apices and are usually not rigidly spinose except in old plants, the tepals are ornamented by hornlike appendages, and the leaves are pinnatifid. The tepals and leaves are covered with yellow glands.

Teloxys multifida (L.) W. A. Weber, comb. nov. Chenopodium multifidum L., Sp. Pl. 220. 1753. A weed in southern Europe (Fl. Europaea 1:93), of doubtful provenance.

Teloxys pumilio (R. Br.) W. A. Weber, comb. nov. Chenopodium pumilio R. Br., Prodromus Fl. Novae-Hollandiae 1:407. 1810. An Australian species present in North America as a waif. It is treated by Munz & Keck (1959) as occurring widely in California, and by Hitchcock & Cronquist (1964). Although not reported for Washington, it has been collected it at Bingen, Klickitat Co., Suksdorf 19658 (COLO)

Teloxys schraderiana (Schultes) W. A. Weber, comb. nov. Chenopodium schraderianum Schultes in Roemer & Schultes, Syst. Veg. 6:260. 1820. A close relative of T. botrys, from E. Africa, present as a weed in Eastern Europe (Fl. Europaea 1964).

Telioxys vagans (Standl.) W. A. Weber, comb. nov. Chenopodium vagans Standl., North Amer. Flora 21(1):26. 1916. C. ambrosioides var. vagans J. T. Howell. It may be premature to synonymize this distinctive taxon, although it is clearly related to T. ambrosioides.

Several additional taxa are recognized in Australia (including Chenopodium cristatum (F.v.M.) F.v.M., C. carinatum R. Br., C. holopterum Thell. & Aellen, C. trigonocarpum Aellen, C. melanocarpum J. M. Black), where the genus has an expecially important center of diversity. However, in view of the current major work on the Australian flora, I prefer to leave further nomenclatural revisions to the Australian workers.

References

Aellen, Paul. 1929. Systematik der Chenopodium-Arten Amerikas, vorwiegend auf Grund der Sammlung des United States National Museum in Washington, D.C., I. Fedde's Repert. Sp. Nov. 26:31-64. II. Op. cit. 119-160.

Flora Europaea (ed. Tutin et al.). 1964, Vol. 1. Cambridge.
Hitchcock, C. L. & A. Cronquist. 1964. Chenopodium, in Flora
of the Pacific Northwest, Vol. 2. Univ. of Washington Press.

Moquin-Tandon, M. A. 1834. Descriptions de plusieurs nouveaux genres de Chenopodées. Ann. Sci. Nat. Bot. (2)1:289-294. 1834.

Standley P. C. 1916. Chenopodium, in North American Flora 2(1):9-31. 1916.